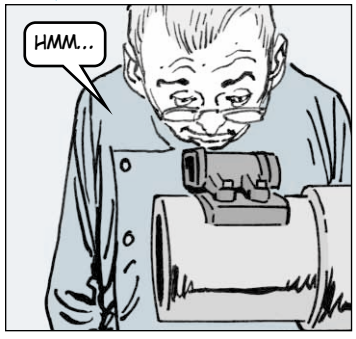
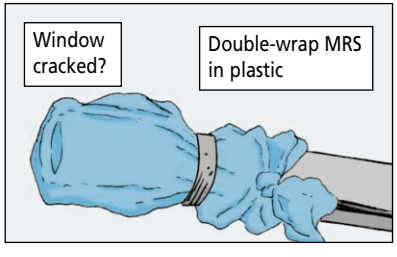
WATCH FOR FROZEN DESICCANT



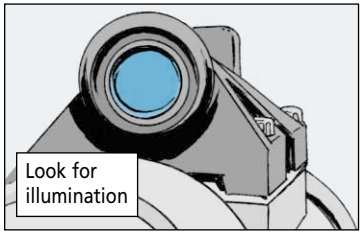
The desiccant inside a tank's muzzle reference sensor (MRS) is there to soak up moisture, but if it freezes, the MRS window can break. Since the MRS uses radioactive tritium for its light source, cracks are real bad news.

The desiccant is supposed to be changed during semiannual maintenance, but to prevent freeze cracks, it's important to check the desiccant for moisture at least monthly during cold weather.

Before you start, take a look at the MRS window. If you see cracks or excessive amounts of moisture, double-wrap the MRS in plastic and notify your support.



If there is no evidence of leaks, check the MRS for proper illumination. Cover the MRS's window and look into the objective end for illumination from the tritium light source. If there is no glow, it could mean the tritium cell is leaking inside the MRS. Stop and call in your radiation protection officer (RPO) immediately!

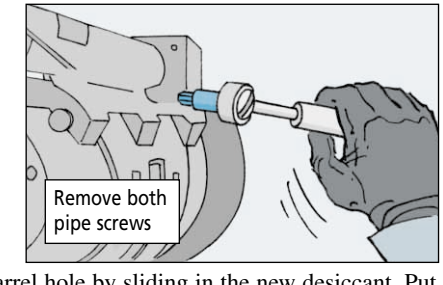


Finally, always wear the latex gloves that come with the desiccant kit, NSN 1240-01-424-4628, to protect yourself against potential tritium leaks.

1. Use a ⅜-in socket-head screw key to remove both pipe screws on the barrel of the MRS.

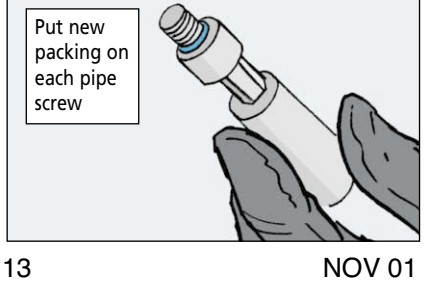
2. Remove the old O-rings and put them in a plastic bag.

3. Unwrap a new desiccant, NSN 6850-01-081-4193, and check its color. If it's blue, use it. If it's some other color, turn it in and get another.



4. Push the old desiccant out of the barrel hole by sliding in the new desiccant. Put the old desiccant in the plastic bag along with the O-rings from the pipe screws.

5. Install two new O-rings, NSN 5331-00-724-7902, from the desiccant kit. Install the screws and torque 'em between 240-250 lb-in.



6. Put the latex gloves in the plastic bag and seal it. Place the bundle into a second plastic bag and seal it.

7. Turn the bag in to your RPO for disposal as radioactive waste.